

REMARKS**Summary of the Office Action**

Claims 1-7, 9-16, and 18-24 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Payne (US 5,420,779) in view of Ito et al. (US 2002/0021097) and Lin et al. (US 2003/0001524). Applicants respectfully traverse this rejection as being based upon references that neither teach nor suggest the combination of features recited by independent claims 1, 9, and 18, and hence dependent claims 2-8, 10-17 and 19-24.

The Final Office Action admits that “Payne fails to teach of an inverter device for a liquid crystal display comprising a low path switching part selectively connecting a low path of the backlight lamp with a ground voltage source in response to an external inverter ON/OFF signal.” Accordingly, the Final Office Action relies upon Ito et al. for allegedly teaching a lighting circuit. Thus, the Final Office Action concludes that it would have been obvious to combine Payne with the teachings of Ito et al. “in order to enhance safety by reducing the difference in electric potential of the voltage supply line with respect to the ground electric potential.” Applicants respectfully disagree.

First, Applicants respectfully assert that Ito et al. explicitly discloses, in FIG. 4, that a DC-AC conversion circuit 4 actually produces an alternating voltage between 0V and 350V, and is supplied to the electric discharge lamp 6 with the secondary winding 8b of the transformer 8. In addition, Ito et al. explicitly discloses (paragraph [0052]) that by using the circuit shown in FIG. 4, it is sufficient to supply a voltage lower than the ground electrical potential, and thus, the safety of the lighting circuit can be enhanced and the manufacturing costs can be reduced. However, according to Ito et al., the low path of the electric discharge lamp 6 is not selectively connected to a ground voltage source. Thus, Applicants respectfully

assert that Ito et al. fails to remedy the deficiencies of Payne in order to establish a *prima facie* case of obviousness.

Second, Applicants respectfully assert that the alleged motivation of enhancing “safety by reducing the difference in electric potential of the voltage supply line with respect to the ground electric potential” is simply not taught by Ito et al. Specifically, as detailed above, Ito et al. makes use of the bridge-type DC-AC conversion circuit 4 to provide an alternating voltage to be supplied to a secondary winding of a transformer 8. Accordingly, Applicants respectfully assert that the alleged motivation attributed to Ito et al. does not exist. Thus, Applicants respectfully assert that Ito et al. further fails to remedy the deficiencies of Payne in order to establish a *prima facie* case of obviousness.

Third, Applicants respectfully assert that combining the teachings of Ito et al. with the circuit structure of Payne would result in changing the principle of operation of Payne, thus rendering the circuit of Payne unsatisfactory for its intended purpose. For example, as shown throughout Payne, the circuitry 10 includes a voltage inverter 11 that transforms the DC voltage obtained from the bus 14 into an AC voltage for illuminating cold cathode fluorescent lamp 12 via connections 107 and 108. In contrast, Ito et al. explicitly requires use of the bridge-type DC-AC conversion circuit 4 to provide an alternating voltage to be supplied to a secondary winding of a transformer 8. Accordingly, Applicants respectfully assert that modifying circuitry of Payne with the teachings of Ito et al. would prevent the circuitry of Payne from its principle of operation, and thus, not function properly.

As MPEP 2143.01 instructs, “[I]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ

1125 (Fed. Cir. 1984).” Furthermore, MPEP 2143.01 instructs, “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).” Accordingly, because modifying Payne with the teachings of Ito et al. would change the principle operation of Payne, i.e., render the function of the voltage inverter circuit 11 of Payne inoperable and unsatisfactory for its intended purpose, Applicants respectfully assert that the Office Action has not established any proper motivation to modify Payne, and thus not established a *prima facie* case of obviousness.

Fourth, as admitted by the Final Office Action, with regard to independent claims 1 and 18, “Payne and Ito et al. fail to teach of an inverter device for a liquid crystal display, comprising: a plurality of backlight lamps.” Accordingly, the Final Office Action apparently relies upon Lin et al. for allegedly teaching backlight lamps interconnected between driving and feedback circuits. Thus, the Final Office Action concludes that it would have been obvious to combine the teachings of Lin et al. with Payne and Ito et al. “in order to provide a plurality of lamps in a device.” Applicants respectfully disagree.

Applicants respectfully assert that Lin et al. fails to provide proper motivation with which to modify Payne and/or Ito et al. Specifically, Applicants respectfully assert that both Payne and Ito et al. are explicitly directed toward controlling single discharge lamps, and consequently, Lin et al. fails to provide any motivation with which to modify Payne and/or Ito et al. to arrive at Applicant’s claimed invention. Moreover, although Lin et al. may disclose control circuitry for a plurality of discharge lamps, Lin et al. fails to provide any motivation,

either implicitly or explicitly, with which to apply the multiple lamp control circuitry to a single discharge lamp, as explicitly disclosed by Payne and Ito et al.

In addition, Applicants respectfully assert that the driving circuits 10 and 20, as shown in FIG. 2 of Lin et al., fail to function to selectively connect low paths of the lamps Lp1 and Lp2 with a ground source, as required by independent claim 9. Accordingly, although Lin et al. may disclose control of multiple lamps Lp1 and Lp2 using an equal number of driving circuits 10 and 20, Applicants respectfully assert that Lin et al. is completely silent with regard to selectively connecting low paths of the lamps Lp1 and Lp2 with a ground source using the driving circuits 10 and 20.

Thus, for at least the above reasons, Applicants respectfully assert that the Final Office Action fails to establish a *prima facie* case of obviousness with regard to at least independent claims 1, 9, and 18.

With regard to independent claim 18, Applicants respectfully assert that the method recited by independent claim 18 is equally neither taught nor suggested by any of Payne, Ito et al., and/or Lin et al. Moreover, as previously pointed-out in Applicants' Amendment filed on April 21, 2006, the allegation that the combination of steps recited by independent claim 18 may be somehow implied by the structures shown in any of Payne, Ito et al., and/or Lin et al. is completely unsupported by any of Payne, Ito et al., and/or Lin et al., regardless of the desire to save paper at the USPTO. Simply put, Applicants respectfully assert that the combination of features recited by at least independent claim 18 has yet to be properly addressed and examined, per MPEP 2144.08(III).

For at least the above reasons, Applicants respectfully submit that independent claims 1, 9, and 18 are neither taught nor suggested by Payne, Ito et al., and/or Lin et al., whether taken alone or in combination. Thus, Applicants respectfully assert that the rejection under 35 U.S.C. § 103(a) should be withdrawn because the above-discussed novel combination of features are neither taught nor suggested by any of the applied references, whether taken singly or combined.

CONCLUSION


In view of the foregoing amendments and remarks, Applicants respectfully request entry of the above amendments, reconsideration, and the timely allowance of the pending claims. Should the Examiner believe that there are any issues outstanding after consideration of this Response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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Date: August 4, 2006

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